

WHAT IS CLAIMED IS:

- 1           1. A data management method, comprising:  
2           backing up contents of a source device at a first client station as at least one object  
3           of a database stored in a data storage subsystem wherein the at least one object represents  
4           an image of the contents of the source device;  
5           using the at least one object, restoring the contents of the source device from the at  
6           least one object to a file in a file system stored on a storage device, said file system  
7           comprising a plurality of files and an address table identifying the location of each file  
8           on said storage device; and  
9           copying the restored contents of the source volume from the file to a target device  
10          so that the target device contains the contents of the source device.
- 1           2. The method of claim 1 wherein the file is stored on storage media at a second  
2           client station.
- 1           3. The method of claim 1 wherein the target device contains the complete contents  
2           of the source device.
- 1           4. The method of claim 3 wherein the contents of the source device contained by  
2           the target device includes files and a file directory of the source device.
- 1           5. The method of claim 1 wherein the data storage subsystem includes a server  
2           coupled to the first client station by a network.
- 1           6. The method of claim 1 further comprising, using the at least one object,  
2           restoring the contents of the source device from the at least one object to a target device  
3           so that the target device contains the contents of the source device.
- 1           7. The method of claim 1 wherein the source device is a raw storage device.
- 1           8. The method of claim 7 wherein the source raw storage device is a logical  
2           volume of at least one magnetic disk drive.
- 1           9. The method of claim 1 wherein the source raw storage device is a partition of a  
2           magnetic disk drive.

1           10. The method of claim 1 further comprising mounting the source device as a  
2 read only device wherein write operations to said source device are prevented during said  
3 backing up of said source device.

1           11. The method of claim 1 wherein said file is a flat file.

1           12. The method of claim 1 wherein said copying uses the UNIX dd command.

1           13. An article of manufacture for data management, wherein the article of  
2 manufacture causes operations to be performed, the operations comprising:  
3           backing up contents of a source device at a first client station as at least one object  
4 of a database stored in a data storage subsystem wherein the at least one object represents  
5 an image of the contents of the source device;  
6           using the at least one object, restoring the contents of the source device from the at  
7 least one object to a file in a file system stored on a storage device, said file system  
8 comprising a plurality of files and an address table identifying the location of each file  
9 on said storage device; and  
10          copying the restored contents of the source volume from the file to a target device  
11 so that the target device contains the contents of the source device.

1           14. The article of manufacture of claim 13 wherein the file is stored on storage  
2 media at a second client station.

1           15. The article of manufacture of claim 13 wherein the target device contains the  
2 complete contents of the source device.

1           16. The article of manufacture of claim 15 wherein the contents of the source  
2 device contained by the target volume includes files and a file directory of the source  
3 device.

1           17. The article of manufacture of claim 13 wherein the data storage subsystem  
2 includes a server coupled to the first client station by a network.

1           18. The article of manufacture of claim 13 wherein the operations further  
2 comprise:

3           using the at least one object, restoring the contents of the source device from the at

4 least one object to a target device so that the target device contains the contents of the  
5 source device.

1 19. The article of manufacture of claim 13 wherein the source device is a raw  
2 storage device.

1 20. The article of manufacture of claim 19 wherein the source raw storage device  
2 is a logical volume of at least one magnetic disk drive.

1 21. The article of manufacture of claim 13 wherein the source raw storage device  
2 is a partition of a magnetic disk drive.

1 22. The article of manufacture of claim 13 wherein the operations further  
2 comprise:

3 mounting the source device as a read only device wherein write operations to said  
4 source device are prevented during said backing up of said source device.

1 23. The article of manufacture of claim 13 wherein said file is a flat file.

1 24. The article of manufacture of claim 13 wherein said copying uses the UNIX  
2 dd command.

1 25. A subsystem for managing data for use with a plurality of client stations  
2 coupled together by a network, said client stations including a source client station having  
3 a source device and a target client station having a target device storing a file system  
4 comprising a plurality of files and an address table identifying the location of each of said  
5 plurality of files, comprising:

6 a data storage device having a database comprising a plurality of objects;

7 a digital data processing apparatus coupled to the storage device, wherein the  
8 digital data processing apparatus is programmed to perform a data management method,  
9 said method comprising:

10 backing up contents of a source device at a source client station as at least  
11 one object of said database stored in said data storage device wherein the at least  
12 one object represents an image of the contents of the source device;

13                   using the at least one object, restoring the contents of the source device  
14                   from the at least one object to a file in said file system stored on a target device of  
15                   a target client station; and  
16                   copying the restored contents of the source volume from the file to a target  
17                   device of a target client station so that the target client station contains the  
18                   contents of the source device.

1           26. The subsystem of claim 25 wherein the file is stored on a target device of a  
2           target client station different from said source client station.

1           27. The subsystem of claim 25 wherein the target device contains the complete  
2           contents of the source device.

1           28. The subsystem of claim 27 wherein the contents of the source device  
2           contained by the target device includes files and a file directory of the source device.

1           29. The subsystem of claim 25 wherein the digital data processing apparatus  
2           includes a server coupled to the first client station by said network.

1           30. The subsystem of claim 25 wherein said method further comprises:  
2           further comprising, using the at least one object, restoring the contents of the  
3           source device from the at least one object to a target device so that the target device  
4           contains the contents of the source device.

1           31. The subsystem of claim 25 wherein the source device is a raw storage device.

1           32. The subsystem of claim 31 wherein the source client station has a magnetic  
2           disk drive and wherein the source raw storage device is a logical volume of said  
3           magnetic disk drive.

1           33. The subsystem of claim 25 wherein the source client station has a magnetic  
2           disk drive and the the source raw storage device is a partition of said magnetic disk drive.

1           34. The subsystem of claim 25 wherein said method further comprises:  
2           mounting the source device as a read only device wherein write operations to said  
3           source device are prevented during said backing up of said source device.

1           35. The subsystem of claim 25 wherein said file is a flat file.

- 1      36. The subsystem of claim 25 wherein said copying uses the UNIX dd command.